

Network Intrusion Detection System using Machine Learning

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Abstract: *The incremental increase in the operation of technology has led to an increase in the quantum of data that's being reused over the Internet significantly over the time period. With the huge quantum of data that's being flown over the Internet, comes the script of furnishing security to the data, and this is where an Intrusion Detection System (IDS) comes into the picture and helps in detecting any virtual security pitfalls. Intrusion Detection System (IDS) is a system that monitors and analyzes data to descry any intrusion in the system or network. Interferers that find different ways to access into a network. The IDS which are being proposed is being enforced using technologies such as Machine Learning Algorithms to classify the attacks and detecting them whenever an attack happens and also to find which machine learning algorithm is suitable for detecting the attack. The Intrusion Detection System (IDS) plays an important part in deterring attacks. Still, arising technologies, like cloud computing, Internet of Things etc., induce a large volume of traffics, which may carry the inapplicable attributes that don't have any impact on discovery of assaults. To overcome these issues, features selection approaches (FSA) have been used to remove non- relevant features and find the important ones.*

Keywords: Host, Network, Detection Techniques, Support Vector machine, Machine Learning, Intrusion Detection System

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